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The Primary Site is a semi-annual publication of the Wyoming Cancer Surveillance Program (WCSP).

This and previous issues are also available online at:

<http://www.health.wyo.gov/phsd/wcsp/news.html>

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The Primary Site

Reaching the Highest Standards

The Wyoming Cancer Surveillance Program again received Gold Certification in 2009 from NAACCR (The North American Association of Cancer Registries).

This accomplishment by the WCSP was not without the partnership of many health facilities, laboratories and physician offices located within and out of the state of Wyoming . Without you as an essential piece of this formidable puzzle, the WCSP would not be able to achieve this goal. Your submission of cancer records to the WCSP in a timely manner was critical in achieving our goal! It's only with your help that our data can be accurate and complete.

I would also like to thank the staff of the WCSP in achievement of the Gold Standard. Without your persistence in collecting the data and attention to detail again this goal would have been unachievable.

Congratulations to everyone involved once again for achieving the Gold Standard in 2008!





Are you ready to share electronic information?

WCSP wants “**how much**” information? Why?

Federal mandates were generated to insure that every state has a central cancer registry and every hospital reports cancer cases, but the registry is of no value, if the information is incomplete. Wyoming’s patients are treated at more than one facility as the needed medical treatments are not always available in the same location. Due to Wyoming’s rural population, the Central Registry completes abstracts for the smaller hospitals.

Deciphering a medical record for pertinent cancer information can be frustrating. The physician’s writing is not always legible, the path report are at times indeterminate, and information is missing from other sources. What is a Central Registrar to do?

We review the Hospital’s medical record looking for key elements to ascertain that the case is complete:

Face sheet: Patient demographic information, attending physician and primary care physician. The patient information is pertinent when researching possible “clusters” of cancer, mortality, the age of onset and sources for future follow-up information.

Pathology report: Identifies the site, the histology, grade, date of collection, possible recurrence, metastasis, size and depth of tumor and where procedures/biopsies were performed.

Hospital History and Physical: Patient history of illness, precursor information, family history of cancer, and social issues that impact the diagnosis.

X-rays, CT Scans, MRI’s, PET scans & US: Over view of the cancer and the extent of the disease.

Operative reports: Physician’s observation of the extent of disease and what other organs may be involved.

Discharge summary: Summarizes the patient hospital stay, possible plan of care and disposition at discharge.

Radiation/Oncology consultations: More in depth history and physical including plan of care, physicians involved in the case, type of chemo and radiation therapy to be used and when treatment should begin.

Radiation completion reports: The actual dates, amount of radiation, how radiation is administered and the number of fractions used.

Dates: An important element of the cancer abstract. The date of first diagnosis and date of death, allows researchers a mechanism for following survival rates and recurrence. Dates indicate how long a patient received treatment and if the length of treatment was adequate to cure or disable the cancer.

Text: On an abstract, describes the disease and treatment in depth for future reference.

Follow-up: The registry may only have a path report and need more detailed information to complete the case. Missing pieces of the puzzle need to be followed back to various health care providers. The cases from the State data base are followed annually until the patient expires or is lost to follow-up.

Access, by Wyo. Cancer Surveillance Program, to the electronic medical record would eliminate the tedious work of the medical record department pulling charts and mailing the needed paper records. WCPS would be able to retrieve the needed information electronically without the expense of paper, time and administration from the hospitals. WCSP employees are required to adhere to the HIPAA regulations regarding Patient Health Information.

WCPS currently has access to three hospital’s electronic health record, EHR. This has enabled us to abstract cases in a timelier manner as well as eliminate sending many inquiry letters for follow-up information.

Join WCSP in our efforts to maintain a complete and accurate cancer data base, become an electronic reporting facility.

Submitted by: Vicki Moxley



Vitamin D

The older I get, the more I want to know about disease prevention and living longer. Looking at the “hot topics” in the news lately, there has been a great deal of talk about vitamin D deficiency.

We know that vitamin D is critical to the health of our bones and teeth, and with other nutrients and hormones in the body, supports bone renewal. Vitamin D also promotes normal cell growth, and is a key factor in maintaining hormonal balance and a healthy immune system. The current recommended daily allowance of vitamin D is 200 IUs (international units). When vitamin D is consumed or UV sunlight strikes the skin, it is synthesized by the liver and converted to Calcidiol, a circulating form of vitamin D. Calcidiol is converted in the kidneys and other organs into Calcitriol, a precursor hormone—a building block of a steroid hormone in your body. There is new research indicating that vitamin D supplementation or sunlight-induced vitamin D conversion may be associated with a lower incidence of breast, prostate and colorectal cancers.

For most Caucasians, avoiding sun exposure and using sun screen is the best way to avoid developing Melanoma and other skin cancers such as Basal and Squamous cell. Therefore, the heat is on to avoid sun exposure and avoid damaging your skin. Darker skin pigment inhibits the body’s ability to synthesize vitamin D from the UV rays of the sun. African-Americans tend to have a high risk of vitamin D deficiency, which may correlate to a higher frequency of diabetes, hypertension and heart failure. According to the Vitamin D Council, if one completely avoids the sun, he/she will need to take approximately 4,000 units of Vitamin D per day or drink 40 glasses of milk or take 10 multivitamins. Studies also show clear links between vitamin D deficiency and obesity, insulin resistance, heart disease, and depression.

But how much sun exposure is “good” exposure and how much is “bad”. Is there such a thing as “healthy sunbathing”? During the summer months, a 15-20 minute walk daily for light skinned persons can be enough exposure to get your daily supply of vitamin D, while darker skinned individuals may require a longer exposure. It is still essential that you use sun block

on your face and scalp, especially if you are out between 11:00a.m. And 2:00p.m.! During winter months, try supplementing your diet with foods rich in vitamin D such as sardines, salmon, tuna, trout, Eastern raw oysters, egg yolks, Swiss cheese, instant oatmeal, fortified breakfast cereals, milk, Silk (soy milk) and orange juice. Take a supplement, fish oil or, dare I say it, cod liver oil!

What about tanning beds as a source of vitamin D? Not on your life...literally. It is not safe to rely on tanning beds as a source of vitamin D. Sun lamps usually favor UVA rays, not the UVB rays that trigger vitamin D synthesis.

Symptoms of vitamin D deficiency may include muscle pain, weak bones/fractures, low energy, fatigue, lowered immunity and signs of depression. If you think you may be suffering with a vitamin D deficiency, check with your health care provider. He/she may order a blood test, prescribe supplements and recommend food sources. Treatment recommendations may change as further research becomes available.

Optimal health is never just about one thing. Although vitamin D may be all over the news...a hot topic especially for Americans over 50, but it is only one piece of the puzzle for healthier you.

References:

1. Dietary Supplement Fact Sheet: Vitamin D. Office of Dietary Supplements, National Institutes of Health
2. Is vitamin D deficiency casting a cloud over your health? Preventing vitamin D deficiency-the new breakthrough in women’s health. Women to Women, 6/27/2005. www.womentowomen.com.
3. Low Vitamin D Levels? Sardines to the Rescue, Patti Neighmond, www.npr.org, August 3, 2009

Submitted by: Deb Broomfield





Breast Cancer, ER/PR, & HER2/neu-What??????

October is Breast Cancer Awareness Month so it's no surprise I thought about writing an article on the subject of breast cancer for our fall issue.

When we abstract a breast cancer case we gather a lot of information such as demographics, date of diagnosis, what kind of cancer or histology it is, and the location where the tumor was found. We enter Collaborative Stage information on tumor size, extension of disease, lymph nodes, and metastasis. The next section is called Site Specific Factors. In this case, the information we enter is related only to breast cancer cases. It is here that we enter information we receive from the patient's laboratory results. The results get transferred into codes that we enter into these fields. I will cover the first two factors and for 2010 cases we will be asked to enter codes for Her2/neu. Factor 1 asks about Estrogen Receptor Assay (ERA), also referred to as ER. Factor 2 is Progesterone Receptor Assay (PRA), or just PR. Why do these results matter to the patient and how do physicians know how to best treat their patients based on lab results? Some of these results may give clues to physicians as to how effective certain treatments might be.

What is ER/PR?

After the cancer is removed, the cells are tested to see if they have hormone receptors. Hormone receptors are like ears or antennae. Estrogen sends signals through those receptors to tell breast cancer cells to grow and cells with estrogen receptors grow and multiply when the estrogen attaches to the receptors. A response to hormonal therapy is more likely if either estrogen or progesterone receptors are present, indicating a positive result. The more receptors present on the cells, the more likely that the therapy will work against the cancer. Another name for hormonal therapy is "anti-estrogen therapy," and the goal of therapy is to starve the breast cancer cells of estrogen.

If the patient lab results come back as both estrogen and progesterone receptors are present (ER+/PR+), their chance of responding to hormonal therapy is about 70%.

If the lab comes back as estrogen-receptor-positive only (ER+/PR-) or progesterone-receptor-positive only (ER-/PR+), there is only about 33% chance of responding to hormonal therapy.

What is HER2/neu and what tests are done for it?

Her2/neu, also known as HER2 or HER-2 stands for human epidermal growth factor receptor 2. This piece of information can be an important part of a patient's diagnosis. So what is it? HER2 is a gene that sends signals to your cells, controlling how they grow, divide and repair themselves. Healthy breast cells have two copies of the HER2 gene. Some breast cancers start when the breast cell has more than two copies of the gene and those copies start to over-produce the HER2 protein, which make the affected cells grow and divide much faster. The cause of the genetic defect comes more from aging, and results from wear and tear on the body, and is not inherited from the patient's parents. It is unknown if or how much pollution and other environmental factors may be causing this problem.

If the patient's breast cancer is tested and the results come back as HER2 positive, it means that the HER2 genes are over-producing the HER2 protein and the cells are growing rapidly and creating cancer. If the results are negative, then the HER2 protein is not causing cancer.

ImmunoHistoChemistry (IHC): measures production of the HER2 protein by the tumor. Test results go from 0 to 3+. The cancer is HER2-positive if the results come back as 3+.



Fluorescence In Situ Hybridization (FISH): uses fluorescent probes to look at the number of HER2 gene copies that are in a tumor cell. If there are more than two copies of the HER2 gene, then the cancer is considered HER2 positive.

How do they treat HER2 positive breast cancer? The patient may be prescribed targeted therapy, also known as immune treatment, along with other chemotherapy drugs. It targets the HER2 protein production and helps to stop the growth of the HER2 positive cancer cells and may shrink tumors before the patient has surgery.

In summary, depending on the patient's laboratory results, treatment can be decided and started as quickly as possible for best chance of cure and survival.

References:

1. ER/PR information found at BREASTCANCER.ORG
2. HER2/neu info came from http://breastcancer.about.com/od/diagnosis/p/her2_diagnosis.htm

Submitted by: Deneen Shadakofsky

The WCSP welcomes a new member!

The Wyoming Cancer Surveillance Program welcomes it's newest member to our team Linda Catlin, September 14, 2009. Linda was hired as our new Follow-up Specialist.

Linda was born and raised in upstate New York. She lived in Cheyenne from 1986 to 1988. Then she moved back to Cheyenne in 2007 with her boyfriend Larry, who is a foreman for Capitol Roofing. Linda has two grown children, in Cheyenne. Linda has one granddaughter named Lekis who also lives in Cheyenne. Linda also loves her animals, Tessa, Mallie, Roxie and Jasper, three dogs and a Main Coon Cat. She enjoys crafting , gardening and Nascar.

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ANNOUNCEMENTS

SAVE THE DATE

North American Association of Central Cancer Registries (NAACCR) 2009 Conference: June 13-20, 2009 San Diego, California - 2010 Quebec City, Quebec, Canada for more information see website www.naaccr.org

National Cancer Registrars Association (NCRA) Educational Conference 2009: May 30 – June 2, 2009 New Orleans - 2010 Conference April 20-23 Palm Springs, California for more information see website www.ncra-usa.org

Please visit us

The WCSP is located at the Wyoming Department of Health within the Preventive Health and Safety Division:

<http://www.health.wyo.gov/PHSD/wcsp/index.html>



2009-2010 NAACCR WEBINARS

Do you feel like you have to jump through hoops to get cancer registry and cancer surveillance training? Are you looking for training that eliminates travel associated with training and minimizes the time away from your desk? If so, the NAACCR 2009-2010 Cancer Registry and Surveillance Webinar Series is for you.

The 2008-2009 NAACCR webinar series will include twelve webinars, one each month, beginning in October 2008 through September 2009. Six of the twelve webinars will focus on site-specific data collection and will include information on data items required by all standard setters. The subject matter will be pertinent to central and hospital registry staff. The remaining six webinars will focus on other aspects of cancer surveillance and data collection, three of which are pertinent to central and hospital registry staff and three of which are more pertinent to central registry staff. However, place of employment does not restrict participation in any of the webinars.

Go to the NAACCR website, www.naaccr.org, for a registration form and complete schedule. Contact Shannon Vann (svann@naaccr.org, 217-698-0800 ext. 9) or Jim Hofferkamp (jhofferkamp@naaccr.org, 217-698-0800 ext. 5) for answers to your questions about the 2008-2009 webinar series. Please forward this message to your data submitters.

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